

REMARKS

This communication is in response to the first Office Action dated October 20, 2004. In that Office Action, the Examiner rejected claims 1-4 as being anticipated by U.S. Patent No. 6,006,259 to Adelman et al. Applicant respectfully requests reconsideration.

The present invention relates to a system and method for coupling tunnel servers (such as those used for virtual private network (VPN) implementations) to tunnel clients executing host applications. Thus, the system and method of the present invention allows for multiple tunnel clients to access, in a VPN environment, multiple tunnel servers while maintaining load balancing and security. The system uses a system known as a tunnel designator to receive and handle requests from tunnel clients. The tunnel designator receives the request from the tunnel client and establishes a VPN tunnel to one of the tunnel servers. The tunnel designator also monitors the loads of the tunnel servers to establish appropriate load balancing between the tunnel clients and the tunnel servers.

The Adelman patent discloses a network clustering system that can provide scalable and load balanced performance to multiple tunnel clients. Specifically, a cluster of VPN tunnel servers can be accessed by multiple tunnel clients in a load balanced scalable and secure method. While the goals of the present invention and the Adelman patent are similar, the particular implementation and methods used are distinct, as will be seen below.

Perhaps the best illustration of the Adelman patent is shown in Figure 4, which shows an IP cluster 401 that contain several general purpose computer units 403, 405, 407, and 409 which act as processors for received message packets. The IP cluster 401 distributes requests to other application servers or similar type units 411 in the network. One important distinction between the Adelman patent and the present invention is that Adelman does not teach a tunnel designator as required by the claims. In the claims, the processor, the receiver and the tunnel traffic distributor are all separate components of the tunnel designator. The tunnel designator **does not** act of the incoming requests from the

tunnel clients, but merely acts as a front-end to the plurality of tunnel servers. It is the tunnel servers that actually act on the incoming requests.

In contrast, the Adelman patent is a protocol that overlays a cluster of tunnel servers. One of the tunnel servers in the cluster of tunnel servers is designated to be the "master" which performs load balancing. Col. 3, lines 19-20. Importantly, the "master" label may and often will rotate among the tunnel servers. Col. 7, lines 5-15. Thus, one of the tunnel servers (which are identical) will be selected as the master tunnel server. See Col. 7, lines 39-41. The advantage of the Adelman system is that there is no need for a front-end load balancer. However, the disadvantage of the Adelman system is that one of the tunnel servers must act as the master and all of the tunnel servers must perform a hash function on received data to determine which tunnel server will act. See Col. 9, lines 50-59; see also Col. 10, lines 1-8.

Thus, the architecture described by Adelman is fundamentally different from that claimed in the present invention as best exemplified in Figures 2 and 3. In the current claimed invention, the tunnel designator is **not** one of the tunnel servers. This is also now explicitly reflected in the claims. This is exactly the opposite of what is taught in Adelman.

Further, new method Claim 5 has been added to provide claim coverage for a method of the present invention. This claim generally follows Figure 3 of the specification and, again in contrast to Adelman, uses a front-end tunnel designator to load balance and map tunnel clients to tunnel servers.

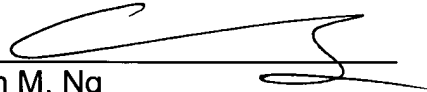
Application No.: 09/732,543

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In view of the above amendment, applicant believes the pending application is in condition for allowance. Please charge any under-payment, or credit any over-payment to our Deposit Account No. 50-0665, under Order No. 248588010US1 from which the undersigned is authorized to draw.

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Respectfully submitted,

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